

IN THE CLAIMS:

Please amend the claims as follows:

1 1. (Currently Amended) A method of correcting resonance position or the external
2 decay time of a waveguide micro-resonator comprising physically altering by deposition or
3 growth of ~~material~~a thin film on the core of the waveguide micro-resonator so as to change the
4 coupling efficiency and shape of the waveguide micro-resonator resonance.

1 2. (Canceled)

1 3. (Currently Amended) The method of claim 1, wherein said altering of the material
2 further occurs in the cladding of the waveguide micro-resonator.

1 4. (Original) The method of claim 1, wherein reaction products of a deposition or
2 growth have different chemical compositions from that of the core.

1 5. (Original) The method of claim 1, wherein said altering comprises a wet chemical
2 reaction.

1 6. (Original) The method of claim 1, wherein said altering comprises a thermal
2 reaction at temperatures above 100°C.

1 7. (Original) The method of claim 1, wherein reaction products of a growth are
2 removed after the reaction associated with said growth.

1 8. (Original) The method of claim 1, wherein reaction products of a growth are left
2 between the core and the cladding after the reaction associated with said growth.

1 9. (Original) The method of claim 1, wherein reaction products of a deposition or
2 growth have refractive indices that range from that of the core to that of the cladding.

1 10. (Original) The method of claim 1, wherein reaction products of a deposition have a
2 graded refractive index profile from that of the core to that of the cladding.

1 11. (Original) The method of claim 1, wherein said altering results in a change in
2 optical path length in said waveguide micro-resonator.

1 12. (Canceled)

1 13. (Withdrawn) A method of correcting the position of or the shape of resonance of a
2 waveguide micro-resonator comprising focusing a large amount of electromagnetic energy onto
3 the resonator.

1 14. (Withdrawn) The method of claim 13, wherein said electromagnetic energy
2 transfers a large amount of thermal energy to the cavity core of said waveguide micro-
3 resonator.

1 15. (Withdrawn) The method of claim 13, wherein one or more materials comprising
2 the waveguide micro-resonator undergoes a physical or mechanical change.

1 16. (Withdrawn) The method of claim 13, wherein one or more materials comprising
2 the waveguide micro-resonator core undergoes a physical or mechanical change, or an index
3 change.

1 17. (Withdrawn) The method of claim 16, wherein one or more materials comprising
2 the waveguide micro-resonator core undergoes an index change as a result of photosensitivity.

1 18. (Withdrawn) The method of claim 16, wherein one or more materials comprising
2 the waveguide micro-resonator core undergoes an index change as a result of a long lasting
3 photo-refractive effect.

1 19. (Withdrawn) The method of claim 13, wherein said electromagnetic energy
2 transfers a large amount of thermal energy to a region surrounding the waveguide micro-
3 resonator cavity.

1 20. (Withdrawn) The method of claim 13, wherein one or more materials surrounding
2 the waveguide micro-resonator undergoes a physical change from non-chemical origins.

1 21. (Withdrawn) The method of claim 13, wherein one or more materials surrounding
2 the waveguide micro-resonator undergoes a mechanical change.

1 22. (Withdrawn) The method of claim 13, wherein one or more materials surrounding
2 the waveguide micro-resonator undergoes an index change as a result of photosensitivity.

1 23. (Withdrawn) The method of claim 13, wherein one or materials surrounding the
2 waveguide micro-resonator undergoes an index change as a result of a long lasting photo-
3 refractive effect.

1 24. (Withdrawn) The method of claim 13, wherein said electromagnetic energy induces
2 a change in optical path length in said waveguide micro-resonator.

1 25. (Withdrawn) The method of claim 13, wherein said electromagnetic energy
2 induces a change in coupling of said micro-resonator, thus a change in coupling efficiency and
3 shape of the micro-resonator resonance

1 26. (Canceled)

1 27. (Canceled)

1 28. (Canceled)

1 29. (Canceled)

1 30. (Canceled)

1 31. (Canceled)

1 32. (Canceled)

1 33. (Canceled)

1 34. (Canceled)

1 35. (Canceled)

1 36. (Canceled)

1 37. (Canceled)

1 38. (Canceled)

1 39. (Canceled)